

AD-A158 662

ALLIED CONTRIBUTIONS TO NATO DEFENSE EFFORTS(U) ARMY  
WAR COLL CARLISLE BARRACKS PA T J CAWLEY MAY 85

1/1

UNCLASSIFIED

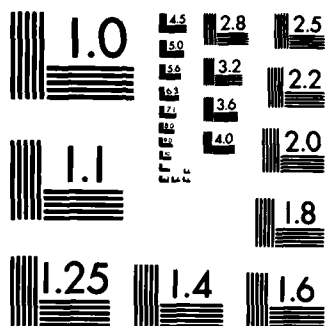
F/G 5/4

NL

END

FILED

DTIC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

2

# STUDY PROJECT

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.

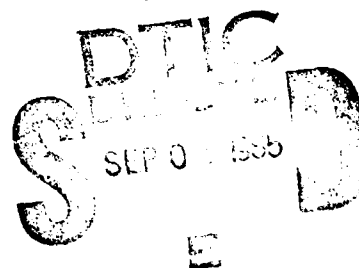
ALLIED CONTRIBUTIONS TO NATO DEFENSE EFFORTS

BY

LTC(P) THOMAS J. CAWLEY

DISTRIBUTION STATEMENT A:  
Approved for public release;  
distribution is unlimited.

MAY 1985



US ARMY WAR COLLEGE, CARLISLE BARRACKS, PA 17013

85 09 03 085

DTIC FILE COPY

AD-A158 662

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Allied Contributions to NATO Defense Efforts		5. TYPE OF REPORT & PERIOD COVERED STUDENT PAPER
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) LTC(P) Thomas J. Cawley		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army War College Carlisle Barracks, PA 17013-5050		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS SAME		12. REPORT DATE May 1985
		13. NUMBER OF PAGES 59
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) Unclas
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution is unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) The original intent of this effort was to examine what appeared to be a relatively clear-cut issue; namely, the constraining effect of social welfare spending on defense spending in Western European NATO countries. The obvious American belief is that the other NATO members have not increased their defense spending to levels consistent with the economic growth they have been experiencing ever since the formation of the alliance. This view gives immediate rise to the question, what are they doing with their money? What the research has shown, and what the paper will attempt to substantiate, is that,		

DD FORM 1473

EDITION OF 1 NOV 65 IS OBSOLETE

Unclas

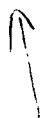
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

85 09 03 085

Unclas

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

one, there is no reasonable mechanism for measuring burden sharing. There are only highly subjective mechanisms which eliminate from consideration as many factors as they include. Two, the available data will not support the conclusion that the other NATO members are not carrying their fair share of the defense burden. And finally, there is not a good way of comparing defense and social welfare spending, but what comparisons are available show that a "zero sum" relationship does not exist between the two.



Unclas

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

If expressed in this paper are those  
of the author and do not necessarily reflect the  
views of the Department of Defense or any of  
its agencies. This document may not be released  
for open publication until it has been cleared by  
the appropriate military service or government  
agency.

# ALLIED CONTRIBUTIONS TO NATO DEFENSE EFFORTS

DISTRIBUTION STATEMENT A:  
Approved for public release;  
distribution is unlimited.

Submitted by

LTC(P) Thomas J. Cawley

Accession For	
DTIC GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



## TABLE OF CONTENTS

I. Introduction. . . . .	1
II. Historical Perspective. . . . .	4
III. Burden Sharing Measurements . . . . .	12
IV. The Data. . . . .	21
V. Social Welfare Spending . . . . .	42
VI. Conclusions . . . . .	52
Notes . . . . .	55
Bibliography. . . . .	57

## I. INTRODUCTION

The original intent of this effort was to examine what appeared to be a relatively clear-cut issue; namely, the constraining effect of social welfare spending on defense spending in Western European NATO countries. The issue is the result of a growing American view that the Europeans are getting a "free ride" in terms of defense; that Americans care more about the defense of Europe than do the Europeans.

The obvious American belief is that the other NATO members have not increased their defense spending to levels consistent with the economic growth they have been experiencing ever since the formation of the alliance. This view gives immediate rise to the question, what are they doing with their money?

Next to defense, the most visible component of government spending in all of the western democracies is social welfare spending. From here it is a relatively simple matter to move to the conclusion that the reason the West Europeans are not bearing their fair share of the NATO defense burden is because of their high levels of social welfare spending. Having come this far, it is almost impossible to stop here. One is virtually compelled to "follow the flow" and conclude that the U.S. is reducing social welfare spending programs, and benefits, in order to increase defense spending, which, in turn, subsidizes European defense costs, so that the Europeans can continue their high levels of social welfare spending.



Given the above logic, it was easy to see why the original thesis would have considerable appeal. There are, however, some very basic assumptions hidden in the "logic flow", all of which must be proven before the thesis can be supported.

The first of these assumptions is that there is some consistent, rational, and equitable mechanism for measuring "burden sharing". The second is that, assuming the first assumption has been met (i.e., an equitable measurement mechanism exists), an analysis of the burden sharing data will, in fact, reveal that the other NATO members are clearly failing to carry their fair share of the defense burden. The final assumption is that, having satisfied the first two assumptions, there will be an acceptable mechanism for comparing defense and social welfare spending; that comparison will show unequivocally that the two share a "zero sum" relationship, that is, as one increases, the other decreases; and that, in fact, welfare spending has been increasing at the expense of defense spending. To prove the thesis one must show that any change in one of the variables, defense spending or welfare spending, has produced at least an approximate equal and opposite reaction in the other.

What the research has shown, and what the rest of this paper will attempt to substantiate, is that, one, there is no reasonable mechanism for measuring burden sharing. There are only highly subjective mechanisms which eliminate from

consideration as many factors as they include. Two, the available data will not support the conclusion that the other NATO members are not carrying their fair share of the defense burden. And finally, there is not good way of comparing defense and social welfare spending, but what comparisons are available show that a "zero sum" relationship does not exist between the two, but rather that both are a function of the conditions of the economy of each country and they appear to follow the same curve in an approximately parallel relationship.

## II. HISTORICAL PERSPECTIVE

Because NATO is a dynamic entity, ever changing, adapting to changed conditions in the world, as well as within the alliance, it is necessary to provide at least an outline of the historical development of the "NATO burden sharing" issue from the U.S. point of view.

To begin with, it is important to remember that the U.S. realized from the beginning (1945) that U.S. interests would be best served by an economically strong and independent Europe. The U.S. was well aware of the need for economic recovery as the necessary pre-condition for the establishment of trade relations. The U.S. was also very concerned about the Communist takeovers in the East European countries, and saw the need to keep Western Europe free of Communism and out of the Soviet sphere of influence.

It was, then, U.S. self-interest that motivated the economic assistance aimed at bringing about European economic recovery, and the military assistance provided via separate assistance programs and the formation of NATO. This same sense of self-interest was also responsible for the U.S.'s desire to limit its involvement and to insure that Europe did not get a "free ride". From the beginning, it was clear that the U.S. intended to terminate its commitments as soon as Europe was able to go it on its own.

Had it not been for the Korean War, one might reasonably

argue that the U.S. would have terminated its involvement in Europe or at least substantially curtailed its involvement by the mid-fifties. However, President Truman was persuaded that the Korean War was the forerunner of an even bigger effort in Europe, and he decided to strengthen the U.S. commitment to Europe.

"By 1950, the US occupation force in the FRG had declined to roughly 98,000, and total deployments in Western Europe came to only 122,000. . . The US vision of NATO. . . did not originally include a large forward deployment of US forces in Europe. The Korean war changed all that. By 1953, US troops in the FRG had increased 250% to 254,000."<sup>1</sup>

Even with the Korean War as evidence of Soviet aggressive intentions, Truman's efforts to increase U.S. involvement in Europe met substantial resistance and touched off significant Congressional and public debates.<sup>2</sup> The clear intention and direction of U.S. involvement was to create an independent Europe (economically and militarily) as quickly as possible, so that the U.S. could reduce, or eliminate its involvement.

For the Europeans, the picture was quite different. They recognized the threat from the U.S.S.R. immediately and consistently. They also realized that they could not achieve economic recovery of any significance if they had to concurrently carry the burden of providing for their own defense.

So, while the U.S. was interested in doing what it could to get Europe to a position of less dependence, Europe was attempting to do whatever it could to increase and continue U.S. involvement, particularly its military involvement. Europe needed the defensive umbrella of the U.S., and it needed to have it for as long as possible. As long as Europe could count on the U.S. to provide defensive cover, it (Europe) could concentrate its efforts on economic recovery.

"From the beginning, perceptions of the need for the North Atlantic Alliance were somewhat different. Americans saw it as a means to create a more viable and independent Europe which would mean a diminished American involvement; Europeans viewed it as a means of ensuring American involvement."<sup>3</sup>

The alliance began with the belief, at least in the U.S., that a conventional force capable of matching the Soviets would have to be built. These efforts continued through the early fifties and lead to continued U.S. cries for more European effort. By the middle of the decade it was clear that NATO could not provide a conventional force capable of matching the Soviets. The NATO members simply were not willing or able to make that level of commitment to military spending.

Eisenhower had publicly expressed the fear that any attempt for the U.S. to keep up with the Soviets in conventional power would result in economic disaster for the U.S.<sup>4</sup>

In the latter half of the 1950s, the Federal Republic of Germany was admitted to NATO, and began to bear some of the financial burden of NATO; and, the U.S. formally adopted a policy of nuclear deterrence.<sup>5</sup> These factors gradually reduced the cries for more European effort on defense.

The calm was short-lived, however. The decade of the sixties brought a swing away from nuclear deterrence back to the need for conventional deterrence capability, a balance of payments problem between the U.S. and Europe, the Vietnam War, the Mansfield Amendments aimed at reducing U.S. forces in Europe, and the French withdrawal from the NATO military structure. The spotlight was again turned on European contributions to its own defense and again the U.S. found those contributions to be inadequate. The most visible expression of U.S. feelings was found in the Mansfield Amendments.<sup>6</sup>

The pressure for more effort by the Europeans continued well into the 1970s. It finally abated somewhat by the mid-1970s because of the Mutual and Balanced Force Reduction (MBFR) talks, and because the balance of payment problem began to show significant improvement.

In the latter half of the 1970s, the Carter administration introduced two programs in NATO; the Long Term Defense Program

(LTDP), and the "three per cent commitment".<sup>7</sup> These efforts represented but another attempt by the U.S. to get the Europeans to do more in defense. Although the cries were not as loud, the perception and the belief that the Europeans were not doing enough remained firmly rooted in the U.S. and continued to motivate U.S. behavior. It is important that this view be compared with reality.

"This emphasis on achieving greater European contributions was somewhat ironic in view of the fact that during the 1970s the Europeans had consistently been improving their defense contributions by an average of approximately three per cent. The three per cent benchmark was selected precisely because that was what the Europeans had been achieving at that time. It was the U.S. defense contribution that had been on the decline."<sup>8</sup>

The following should also be noted:

"It is interesting to note that this period of the 1970s, which American analysts have a habit of referring to as the decade when the West slackened off its defence effort because of detente, was a period in which several European nations achieved a substantial degree of modernization, particularly the Bundeswehr."<sup>9</sup>

Two points need to be made about this period. The real achievements and contributions of the Europeans were understated and "under-appreciated" in the U.S. More importantly, the adoption of the three per cent rule brought into existence an overly simplified and very visible measure which would become the focus of U.S. attention and virtually the sole measure of the value of European contributions to NATO.

Timing made matters worse. Just as the three per cent rule was put into effect, the Iranian hostage situation developed, the Soviets invaded Afghanistan, and detente collapsed. All of these events operated to intensify the spotlight on the size of European contributions to NATO. The economic situation could not have been worse. Recession returned to Europe in 1980 and made even maintenance of the status quo difficult. Consider the case of West Germany.

"The Federal Republic has survived many recessions, but the current state of its economy will clearly affect its role in NATO. The economic downturn in 1974-75, caused (by) . . . the OPEC embargo, produced a surge of inflation, a fourfold increase in unemployment, and a real reduction in national output. Real growth rebounded sharply from 1976 to 1979, and the rate of inflation fell back to more normal levels for the FRG. But the level of unemployment



"did not recover so quickly. By 1980 recession came again, after the drop in Iranian oil production. In 1981 the real rate of economic growth was negative, inflation remained at about five per cent, and the unemployment rate surged above five per cent. At the same time the German mark fell sharply against the dollar, further increasing domestic inflationary pressures, particularly from oil purchases made in dollars.

"The devalued mark made FRG products more competitive on world markets and helped to stimulate exports, but despite forecasts of partial recovery in 1982, the real rate of growth actually declined another 0.6 per cent in the first quarter. Moreover, high levels of unemployment persisted and the proportions of foreign citizens unemployed continued to rise."<sup>10</sup>

By the time the Reagan Administration took office, there was considerable attention focused on European defense spending and widespread dissatisfaction with it in the U.S. The Administration shared this dissatisfaction and did nothing to take the pressure off the Europeans.

Matters continued to worsen when the Europeans failed to show vigorous support for the U.S. response to the imposition of martial law in Poland in December 1981. U.S. suspicions

and fears deepened. Again, it looked as though the European nations were putting their economic objectives above security needs.

The continued participation of the West Europeans in the construction of the Soviet gas pipeline, and the agreement of the West Europeans to buy natural gas from the Soviets - in the face of the events in Poland - only provided additional fuel for U.S. suspicions.

From the beginning the U.S. aim has been to reduce U.S. involvement in the defense of Western Europe, while at the same time trying to minimize Soviet influence in Western Europe. The U.S. has consistently been suspicious of the intentions of the Europeans. The U.S. has also relied on relatively simplistic measures of performance, like the 3% rule, to evaluate European contributions. As a result, European contributions have been understated and "under-appreciated". And finally, the U.S. has expected that, since it carries such a large share of the European defense burden, the West European nations will continually and consistently support all U.S. initiatives and policies - without regard for the impact of those policies and initiatives on their respective national objectives. In short, the U.S. view has been naive, and somewhat shallow.

### III. BURDEN SHARING MEASUREMENTS

Central to any argument about the contributions of any nation to NATO burden sharing are the mechanisms used to measure national contributions. The validity of any position on the issue is linked directly to the validity of the measurement mechanisms.

In the burden sharing argument, the key variable, by agreement between the NATO members, is "Total Defense Spending". This has become the sole determinant of a country's contribution to the alliance, the sole measure of its share of the burden.

The key question, then, centers on what constitutes defense expenditures. "These are defined broadly, for NATO purposes, as expenditures made by national governments specifically to support and meet the needs of the country's armed forces."<sup>11</sup>

The immediate problem is one of omission, the omission of all of the political, social, psychological, and non-military economic contributions a country makes to the common defense. Accordingly, a wide range of actions and efforts are ignored when computing a country's "share of the burden". Such important things as economic sanctions, participating in olympic boycotts, aid to other countries, both within the alliance and outside of it, overflight rights, basing rights, bases furnished to other allies, accepting U.S. controlled nuclear weapons,

raising and lowering trade restrictions, and innumerable others are left out of the equation.

The baseline definition itself immediately eliminates many critical elements from consideration and makes the achievement of a fair and meaningful comparison impossible.

The inadequacy of the measurement is not limited to the items omitted from consideration. Further distortion is created by the inclusion of elements that contribute nothing to the defense of Europe. For example, all U.S. defense spending is counted, including that spent for troops and facilities in Korea, Japan, Hawaii, Alaska, the Pacific and Indian Oceans, and in the United States. The logic is that all forces can be pulled from wherever they are and committed to Europe should the need arise, therefore, all should be counted. The assumption is simply unreasonable. There are virtually no circumstances under which all U.S. forces would be withdrawn from current missions or areas and committed to the defense of Europe, certainly not those committed to the defense of North America. Even if it were possible to commit all U.S. forces to the defense of Europe, there is absolutely no way of committing U.S. facilities in the U.S. and around the world.

Clearly, there is no reasonable basis for crediting the entire U.S. defense budget to the defense of Europe. The practice of comparing total U.S. defense spending, for its

worldwide commitments, with the defense spending of West Germany, which is virtually 100% committed to the defense of Europe, and then criticizing the German contribution, simply lacks intellectual credibility.

On the other hand, some of the same sorts of miscounting apply to the Europeans. For example, British involvement in Northern Ireland and the Falklands, Portugal's involvement in Angola, and French and Italian expenses in the Mid-East were all credited to the defense of Europe under the current rules.

By confining the burden sharing measurement mechanism to defense spending, the case is biased not only by the omission of non-defense efforts and the inclusion of world-wide expenses, but also by the omission of defense outputs, that is, the force capability provided by the spending. By measuring money spent, rather than capability acquired, the advantage goes to the most inefficient country with the highest inflation. Under these circumstances the more \$7,000 coffee pots, \$600 toilet seats, and \$400 hammers the country buys, the better it looks. The simple fact is that by measuring levels of spending, one does not measure contributions, only spending is measured.

Some examples to be considered in this regard: Conscript forces versus volunteer forces. The cost of conscripts is normally significantly understated when compared to volunteer forces. If one were to focus on outputs, concerning volunteer

forces, the question would be, what size force can be acquired for the money spent. With the exception of Belgium and the Netherlands, the answer is always the same, all other allies could have bought a much larger force than did the U.S., for the same amount of money. Put differently, if allied defense spending for 1979 is costed based on U.S. pay rates, the value of allied spending would increase by 20% and would equal U.S. spending.<sup>12</sup>

Once the force structure has been bought, how does one account for the quality of training, morale, and leadership? Level of defense spending in no way reflects these factors, which have serious impact on force capability.

The same sorts of questions can be asked about equipment. That is, what amount of equipment can be bought in each of the member countries for the same amount of money? How good is the equipment? How much combat capability is ultimately provided?

Some distinctions should also be made between manpower and equipment acquired, and money spent for depreciation, or for current operational capability that might be very necessary but "highly perishable". All this is to say that "defense outlays reflect gross outlays, not increments. . ." in defense.<sup>13</sup>

A final note on inputs versus outputs. One might argue that the only appropriate measure of contributions to NATO should be forces forward deployed, or deployable, in Europe. If such

criteria were used, the U.S. contribution would be substantially changed, since only those forces clearly marked for the European theater would be counted. The U.S. contribution would not be considered so large under this criteria, though it would clearly be the most expensive force provided, since the bulk of U.S. defense spending would become overhead. Although the Europeans have not said so, one cannot help but wonder if they don't often see it this way.

Having looked at all the things that are not being measured, it is time to examine that which is being measured, namely, defense spending.

On the surface, it appears to be a simple, straightforward measure. Perhaps it was the appeal of this simple appearance that led to its selection as the key factor in measuring burden sharing. Unfortunately, it is neither simple, nor straightforward. It is as complex, if not more complex, a measure as any that might have been used.

Since the intent is to measure performance among many different nations, and, since the countries have different currencies and different inflation rates, conversion factors must be developed to convert spending in each country to standard entries on a common baseline. The relative value of one currency to another is clearly stated on the open market, so, there is no problem in finding this data.

Problems do arise, however, from the facts that exchange rates fluctuate all the time and the value assigned to defense spending is extremely sensitive to the exchange rate applied.

Consider the following examples:

" . . . when FRG outlays in 1980 are converted using 1970 exchange rates, the FRG dollar expenditure was \$13.5 billion; if 1980 rates are used the total was \$25.1 billion. A similar pattern is observed for the French figures. The effect of using 1970 exchange rates is exactly the reverse for Greece, Italy, and particularly Turkey."<sup>14</sup>

" . . . using December to December changes, the German Mark appreciated by 14.4% against the dollar from 1977 to 1978, appreciated by 8.4% from 1978 to 1979, and depreciated 11.4% from 1979 to 1980. This swing in exchange rates by itself would produce an apparent rapid increase in FRG defense outlays expressed in dollars from 1977 to 1979, and a rapid decline from 1979 to 1980, but such swings would dramatically overstate actual shifts in real defense purchases."<sup>15</sup>

Correcting for inflation is no easier. The first problem here is the fact that each country defines and measures inflation somewhat differently. Real standardization in this area is impossible. To make matters worse, inflation in allied



countries can also be affected dramatically by the currency exchange rates. For example, oil is priced in dollars. As the value of a country's currency fluctuates relative to the dollar, so does the cost of living in that country, because the price it pays for oil is fluctuating with the exchange rate. The inflation rate, in turn, will follow the path of the cost of living.

The attempt to establish a common baseline, against which the defense spending of each of the allies can be measured, has lead not to objective measures but to some highly subjective judgements concerning which exchange rates and inflation factors should be applied. The ultimate complaint is that one can support any number of contradictory positions simply choosing different exchange rates or inflation indexes.

" . . . The rate of inflation portrayed by different indexes, reflecting different sets of prices, frequently vary sharply, and, therefore, estimates of real defense spending will vary significantly based on the index selected. . . Disparities in international rates of inflation further complicate these problems of making meaningful comparisons of defense outlays. . . "16

And also,

"Shifts in exchange rates do reflect shifts in resource costs for those goods traded in international markets but not for the larger portion of national output that is produced and sold in domestic markets. Hence, selecting the exchange rate of some base year for computation will exclude some real changes in resource costs, but annual exchange rates will tend to overstate shifts in such costs. . ." <sup>17</sup>

In order to avoid the problems of adjusting for inflation and exchange rates, analysts frequently rely on measures like defense spending as a percentage of Gross Domestic Product (GDP), defense spending as a percentage of the national budget, and, defense spending as a per capita expenditure.

These measures, however, have their own unique distortions to contribute. Percentage and per capita baselines give no indication of the absolute ability of a country to participate in defense spending. Total GDP, total population, total national budget, all of these factors must be known and accounted for in order to have an understanding of the total wealth, and, therefore, the true capability of a nation to allocate resources to defense. <sup>18</sup>

In summing up the discussion of measurement techniques, one is struck by the paucity of meaningful and reliable measures available. To adopt the NATO approach of looking only at defense

spending is to exclude not only everything not in the defense budget, but also all the products and capability produced by defense spending. It eliminates too much of importance and what it does measure is tainted by the subjective selection of adjustment factors that can produce results supporting virtually any proposition. Beyond the NATO approach there is no measure, or set of measures, that adequately consider the vast array of total contributions made by each of the allies and converts them to some sort of standard measure. In short, there simply is no valid mechanism for comparing the various contributions of the allies to the common defense.

#### IV. THE DATA

The intent of this section is to examine the data supporting (or contradicting) the proposition that the non-U.S. NATO allies are not carrying their "fair share" of the defense burden. For the most part, and unless otherwise noted, the data will be taken from the Secretary of Defense's annual "Report on Allied Contributions to the Common Defense."

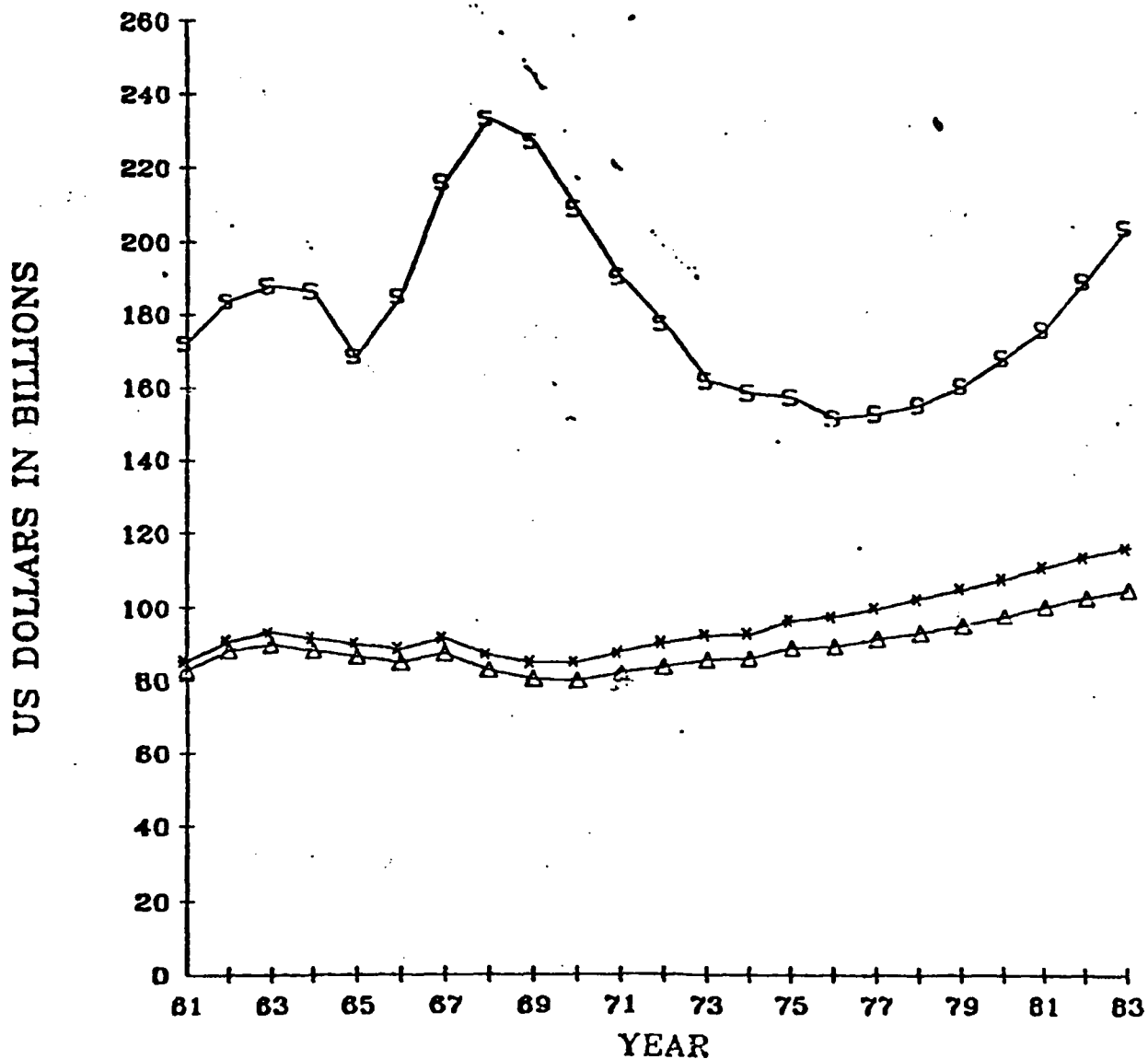
Figures 1 and 2 show total defense spending, in dollars, over the past two decades. The most obvious point of this data is that the U.S. spends a great deal more on defense than do her allies, singly or together. As indicated in Figure 2, the U.S. portion of the NATO total was about 63%. All other NATO allies combined contributed only 34%. This is the essence of the U.S. complaint about the other allies. They simply are not spending enough on defense.

On the other hand, the data also shows a very consistent performance by the Europeans with all countries, except Portugal, showing a net increase over the period 1971 - 1982. The U.S., however, shows a very erratic pattern of ups and downs, with a negative net change over the 1971 - 1982 period.

Figures 3 and 4 show defense spending as a percent of Gross Domestic Product (GDP). The message is essentially the same as that conveyed by Figures 1 and 2; the U.S. is spending twice as much as the other NATO allies. As with total defense spending, however, the

FIGURE 1

**TOTAL DEFENSE SPENDING (FISCAL YEAR)**  
**US DOLLARS IN BILLIONS**  
**(1982 CONSTANT PRICES - 1982 EXCHANGE RATES)**



**LEGEND**

S UNITED STATES  
 Δ NON US NATO  
 \* NON US NATO & JAPAN

**FOOTNOTES**

Based on the NATO definition of defense spending

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 25.

FIGURE 2

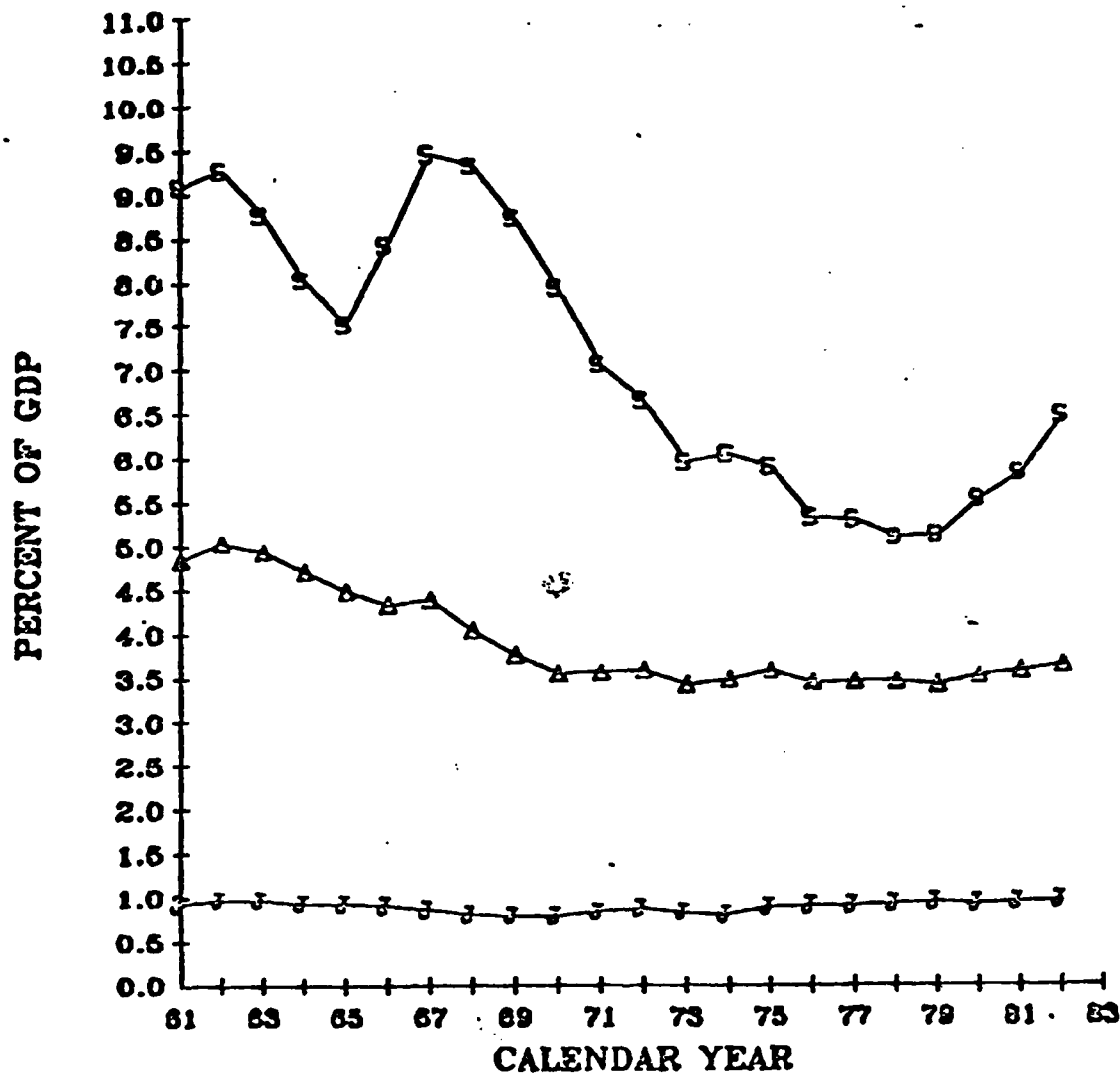
Total Defense Spending (FY)  
(1982 Constant Dollars in Billions - 1982 Exchange Rates)

	1971			1982			Total % Change
	\$	% of NATO & Japan Total	Rank	\$	% of NATO & Japan Total	Rank	71 vs 82
Belgium	\$ 1.98	0.7%	9	\$ 2.89	1.0%	9	+46.0
Canada	\$ 5.52	2.0%	7	\$ 6.32	2.1%	7	+14.6
Denmark	\$ 1.35	0.5%	10	\$ 1.40	0.5%	13	+3.9
France	\$ 15.86	5.7%	4	\$ 22.52	7.4%	3	+42.0
Germany	\$ 17.64	6.3%	3	\$ 22.35	7.3%	4	+26.7
Greece	\$ 1.21	0.4%	13	\$ 2.64	0.9%	11	+117.4
Italy	\$ 7.67	2.8%	5	\$ 9.09	3.0%	6	+18.5
Luxembourg	\$ 0.02	0.0%	15	\$ 0.04	0.0%	15	+88.7
Netherlands	\$ 3.85	1.4%	8	\$ 4.46	1.5%	8	+15.9
Norway	\$ 1.32	0.5%	11	\$ 1.70	0.6%	12	+29.0
Portugal	\$ 1.04	0.4%	14	\$ 0.80	0.3%	14	-22.9
Turkey	\$ 1.26	0.5%	12	\$ 2.75	0.9%	10	+118.8
UK	\$ 23.45	8.4%	2	\$ 26.17	8.6%	2	+11.6
US	\$ 190.27	68.4%	1	\$ 189.97	62.5%	1	-0.2
Japan	\$ 5.70	2.1%	6	\$ 11.00	3.6%	5	+93.0
Non US NATO	\$ 82.17	29.5%		\$ 103.15	33.9%		+25.5
Non US NATO + Japan	\$ 87.87	31.6%		\$ 114.15	37.5%		+29.9
Total NATO	\$ 272.44	97.9%		\$ 293.12	96.4%		+7.6
Total NATO + Japan	\$ 278.14	100.0%		\$ 304.12	100.0%		+9.3

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 26.

FIGURE 3

**TOTAL DEFENSE EXPENDITURES (CY)  
AS A PERCENTAGE OF GROSS DOMESTIC PRODUCT**



**LEGEND**

S UNITED STATES  
Δ NON US NATO  
J JAPAN

**FOOTNOTES**

Based on the NATO definition of defense spending

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 28.

FIGURE 4

## Total Defense Spending as a Percent of GDP

	1971			1982			Total % Change
		% of Highest Nation	Rank		% of Highest Nation	Rank	71 vs. 82
Belgium	2.9	39.2%	10	3.4	48.7%	6	+17.7
Canada	2.2	30.2%	13	2.1	30.5%	13	-4.5
Denmark	2.4	32.8%	12	2.5	35.5%	12	+2.3
France	4.0	54.1%	6	4.2	59.6%	5	+4.2
Germany	3.4	45.5%	9	3.4	48.3%	8	+0.4
Greece	4.7	63.3%	4	7.0	100.0%	1	+49.4
Italy	2.7	36.5%	11	2.6	37.4%	11	-3.2
Luxembourg	0.8	10.8%	15	1.3	17.9%	14	+57.0
Netherlands	3.4	46.5%	7	3.2	46.3%	9	-5.8
Norway	3.4	45.8%	8	3.0	43.2%	10	-10.9
Portugal	7.4	100.0%	1	3.4	48.4%	7	-54.3
Turkey	4.5	61.3%	5	5.2	75.0%	3	+15.8
UK	4.9	66.6%	3	5.1	73.3%	4	+4.1
US	7.1	95.3%	2	6.5	92.7%	2	-8.0
Japan	0.8	11.4%	14	1.0	14.0%	15	+15.9
Non US NATO	3.6	46.1%		3.7	52.3%		+2.7
Non US NATO + Japan	3.0	40.4%		2.9	41.2%		-3.4
Total NATO	5.5	74.4%		5.1	73.4%		-6.7
Total NATO + Japan	5.0	67.7%		4.5	63.7%		-10.9

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 29.



Europeans show a more consistent pattern, with less dramatic shifts than the U.S. pattern. Here again, the net change for the decade is positive for the aggregate European total, but negative for the U.S.

Figures 5 and 6 present defense spending on a per capita basis, and these too indicate that the U.S. is spending a great deal more than the European allies. As with the other data, however, the trend line over the decade of the 1970s is negative for the U.S. and positive for the European allies.

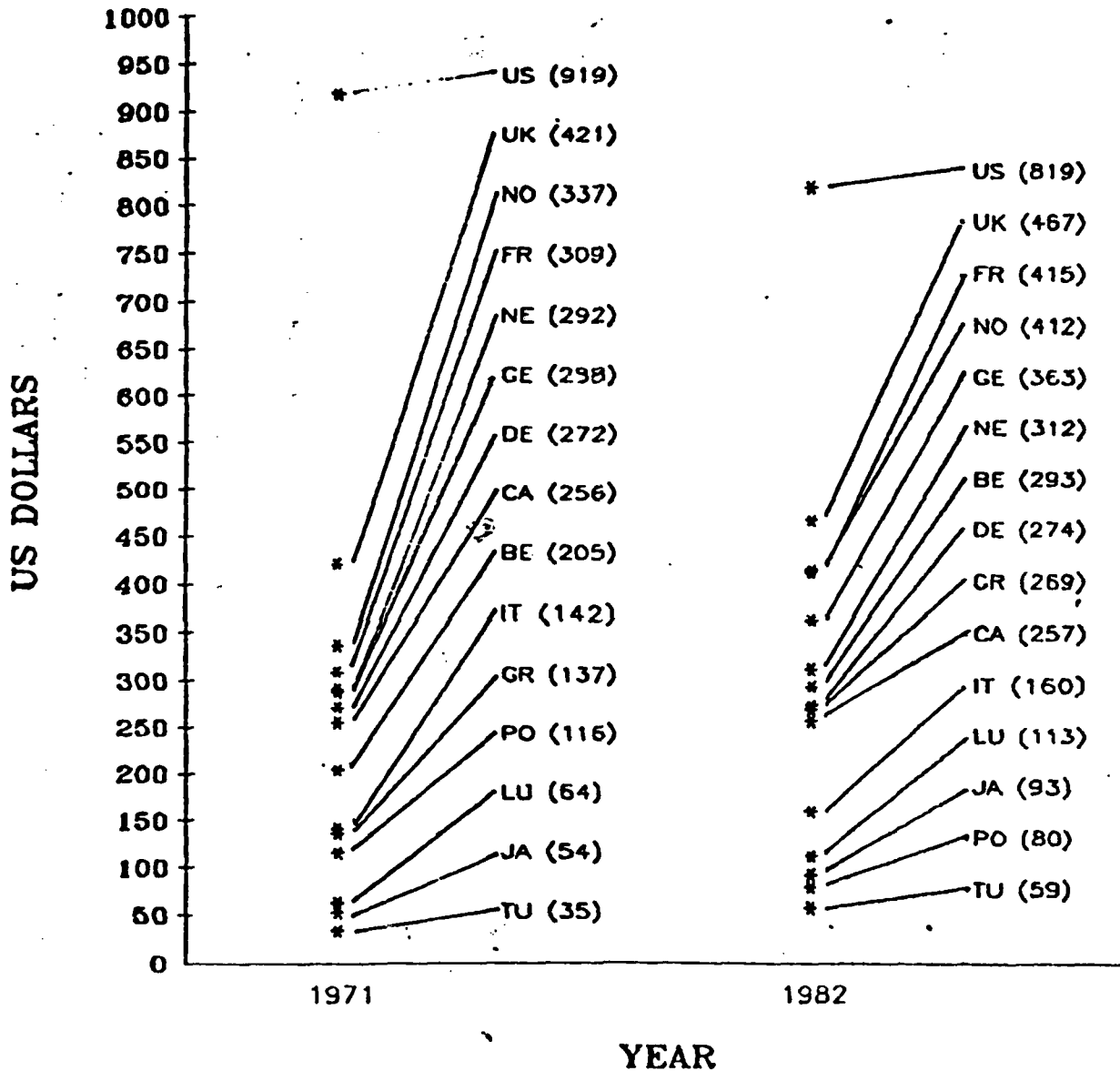
At this point all that can be said with certainty is that the U.S. spends much more on defense than do the European allies. The data presented says nothing about whether or not current spending levels are equitable, based on wealth, or appropriate, based on the world-wide interests of the U.S. and the regional interests of the Europeans.

Figure 7 shows an attempt to assess "ability to spend." It takes a country's relative share of the total GDP of NATO + Japan, and multiplies it by that country's relative strength in terms of per capita GDP. The product is then converted to an overall relative ranking based on a 100% scale. This new factor is called the prosperity index and it is intended to be a measure of relative wealth, and, therefore, the best indicator of ability to contribute to defense spending. The data suffers some distortion because of the inclusion of Japan, but not enough to make a significant difference.

Figure 8 contains the same data as Figure 7, with the addition of population share. What it tells us is that the U.S. has 43.7% of the total GDP of all NATO members + Japan. The largest European share

FIGURE 5

PER CAPITA TOTAL DEFENSE SPENDING (FY)  
US DOLLARS  
(1982 CONSTANT DOLLARS - 1982 EXCHANGE RATES)



Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 72.

FIGURE 6

Per Capita Defense Spending  
(1982 Constant Dollars - 1982 Exchange Rates)

	1971			1982			Total % Change
	\$	% of Highest Nation	Rank	\$	% of Highest Nation	Rank	71 vs 82
Belgium	\$ 205	22.3%	9	\$ 293	35.8%	7	+43.3
Canada	\$ 256	27.8%	8	\$ 257	31.4%	10	+0.5
Denmark	\$ 272	29.6%	7	\$ 274	33.4%	8	+0.7
France	\$ 309	33.7%	4	\$ 415	50.7%	3	+34.3
Germany	\$ 268	31.3%	6	\$ 363	44.3%	5	+26.0
Greece	\$ 137	15.0%	11	\$ 269	32.9%	9	+96.1
Italy	\$ 142	15.5%	10	\$ 160	19.6%	11	+13.0
Luxembourg	\$ 64	6.9%	13	\$ 113	13.8%	12	+77.9
Netherlands	\$ 292	31.8%	5	\$ 312	38.1%	6	+6.9
Norway	\$ 337	36.7%	3	\$ 412	50.4%	4	+22.3
Portugal	\$ 116	12.6%	12	\$ 80	9.8%	14	-31.1
Turkey	\$ 35	3.8%	15	\$ 59	7.2%	15	+69.4
UK	\$ 421	45.8%	2	\$ 467	57.1%	2	+11.0
US	\$ 919	100.0%	1	\$ 819	100.0%	1	-10.9
Japan	\$ 54	5.9%	14	\$ 93	11.4%	13	+72.8
Non US NATO	\$ 249	27.1%		\$ 292	35.6%		+17.2
Non US NATO + Japan	\$ 202	22.0%		\$ 242	29.6%		+20.0
Total NATO	\$ 507	55.2%		\$ 501	61.1%		-1.3
Total NATO + Japan	\$ 433	47.1%		\$ 432	52.8%		-0.1

Sources: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 73.

FIGURE 7

## Computation of Prosperity Index

(1)	(2)	(3)	(4)
GDP Share (A1)	Per Capita GDP (A2) (% of Highest Nation)	(1) x (2)	Prosperity Index (A4) (% Allocation of Col (3))
Belgium	1.23%	77.24	0.96%
Canada	4.21%	364.25	4.53%
Denmark	0.82%	65.83	0.82%
France	7.81%	570.32	7.09%
Fed. Rep. Germany	9.55%	750.01	9.33%
Greece	0.55%	15.38	0.19%
Italy	5.03%	225.82	2.81%
Luxembourg	0.05%	3.17	0.04%
Netherlands	1.99%	140.25	1.74%
Norway	0.81%	81.28	1.01%
Portugal	0.34%	5.94	0.07%
Turkey	0.76%	6.24	0.08%
United Kingdom	6.83%	421.98	5.25%
United States	43.77%	4181.32	51.99%
Japan	16.25%	1133.78	14.10%
Non US NATO	39.97%	2727.70	33.91%
Non US NATO + Japan	56.23%	3861.48	48.01%
Total NATO	83.75%	6909.02	85.90%
Total NATO + Japan	100.00%	8042.80	100.00%

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense  
(Washington, D.C.: Department of Defense, March 1984), p. 22.

FIGURE 8

A. Selected Indicators of Ability to Contribute

	(A1)	(A2)	(A3)	(A4)
Rank	GDP Share	Population Share	Per Capita GDP (% of Highest Nation)	Prosperity Index Share
1	US 43.77%	US 32.98%	NO 100.0%	US 51.99%
2	JA 16.25%	JA 16.77%	US 95.5%	JA 14.10%
3	GE 9.55%	GE 8.76%	CA 86.6%	GE 9.33%
4	FR 7.81%	IT 8.05%	DE 80.7%	FR 7.09%
5	UK 6.83%	UK 7.96%	GE 78.5%	UK 5.25%
6	IT 5.03%	FR 7.71%	FR 73.0%	CA 4.53%
7	CA 4.21%	TU 6.65%	NE 70.5%	IT 2.81%
8	NE 1.99%	CA 3.50%	JA 69.8%	NE 1.74%
9	BE 1.23%	NE 2.03%	LJ 66.3%	NO 1.01%
10	DE 0.82%	PO 1.43%	BE 63.0%	BE 0.96%
11	NO 0.81%	EE 1.40%	UK 61.8%	DE 0.82%
12	TU 0.76%	GR 1.39%	IT 44.9%	GR 0.19%
13	GR 0.55%	DE 0.73%	GR 28.2%	TU 0.08%
14	PO 0.34%	NO 0.59%	PO 17.3%	PO 0.07%
15	LJ 0.05%	LJ 0.05%	TU 8.2%	LJ 0.04%
Non US NATO	39.97%	50.25%	57.3%	33.91%
Non US NATO + Japan	56.23%	67.02%	60.4%	48.01%
Total NATO	83.75%	83.23%	72.4%	85.90%
Total NATO + Japan	100.00%	100.00%	72.0%	100.00%

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 16.

belongs to West Germany with 9.5% of the total. The combined total for all of NATO minus the U.S. is 39.9%, still noticeably less than the U.S. share. The "wealth-gap" between the U.S. and its NATO allies is made even wider when per capita GDP is considered and the Prosperity Index computed. The U.S. ends up with a 52% share of the total prosperity, i.e., 1.5 times the total prosperity of the rest of NATO, and 5½ times the prosperity of the next most prosperous member of NATO, West Germany.

Based on the data, one would expect to find the U.S. contributing substantially larger inputs to the common defense than the rest of NATO. Figure 9 provides some indicators of inputs and outputs. In pure defense spending, the U.S. is providing 62.47% of the total NATO defense spending, which is 1.8 times the non-U.S. NATO level of 33.92%. This represents more U.S. spending than would be expected based on the prosperity index where the U.S. has a prosperity level of 1.5 times the non-U.S. NATO total. The non-U.S. NATO total spending level of 33.92% is remarkably consistent, however, with the non-U.S. NATO Prosperity Index level of 33.91%. Non-U.S. NATO has 33.91% of the prosperity and is providing 33.92% of the defense spending.

The explanation for the apparent excess spending by the U.S. seems to be found in the figures for Japan. The U.S. prosperity index is 3.7 times that of Japan. In contrast, U.S. defense spending is 17.25 times that of Japan. It would appear, therefore, that excessive U.S. defense spending is the result of Japan's unreasonably low level of defense spending.

The other defense input indicator, Defense Spending Change (column B-2) over the decade of the 1970s, shows that the net change in U.S. spending was a negative 0.15%, while non-U.S. NATO spending increased 25%. The rest of the indicators in Figure 9 are output indicators, that is, defense capability purchased by the defense spending.

Active defense manpower figures show that the U.S. is contributing 42.12% of the total NATO + Japan forces. This appears to be more than the U.S.'s fair share based on its 32.98% share of the total population. On the other hand, the fact that the U.S. has 51.99% of the total prosperity and a 62.47% share of total defense spending, would seem to indicate an ability to buy a very substantial force. The additional fact that U.S. commitments span the globe further argues for a very large U.S. manpower share.

The non-U.S. NATO share of the Active Defense Manpower is 54.3%, a very respectable contribution given its 50.25% of the total population, its 39.9% share of defense spending, its 33.9% share of total prosperity and the fact that the vast majority of those forces are committed to Europe.

Comparison of this performance with the 3.49% manpower share contributed by Japan provides marked contrast. Japan has 16.77% of the total population, 14.10% of the total prosperity, and 16.25% of the total GDP. Its low manpower contribution is consistent, however, with its low defense spending (3.62% of total).

The addition of reserve forces to the comparison merely extends the relationships indicated by the active manpower comparison. Specifically, the U.S. share is greater than its share of total population (39% vs 33%), but not as large as its defense spending level and world-wide commitments would lead one to expect. On the other hand, the non-U.S. NATO share is larger than one could reasonably expect based on the data, whereas Japan's share is unreasonably small.

The net change in Active Manpower over the 1970s was slightly negative (3.15%) for the non-U.S. NATO nations, but significantly negative for the U.S. (16.33%).

The last two columns of Figure 9 provide significant indicators of defense capability contributed. Ground Forces ADEs (Armored Division Equivalents) ". . . (are) a relative measure of effectiveness of ground forces based on quantity and quality of major weapons." <sup>19</sup> Tac Air Combat Acft Share indicates ". . . each countries' share of the allied total number of fighter/interceptor, attack, bomber and tactical reconnaissance aircraft." <sup>20</sup>

These two indicators are dramatic in content. With 62.47% of the total defense spending, the U.S. is getting only 38.8% of the armored division equivalents (ADE) and 40.9% of the tactical combat aircraft. The non-U.S. NATO members, with only 33.9% of the defense spending, are getting 57% of the ADEs and 55.4% of the combat aircraft.

The strong implication of this data is that the U.S. is very wasteful in its defense spending; it is spending more and getting less. One can respond to this charge with the argument that the U.S. spends very



heavily on strategic forces and that accounts for the relatively low level of tactical force acquisitions. There is some validity to that argument, but not enough to totally defeat the claim that U.S. spending is simply more wasteful than that of the other NATO allies. It is here that the \$7,000 coffee pots, \$600 toilet seats, and \$400 hammers start to hurt.

Figure 9 has significantly weakened the charge that the non-U.S. NATO allies are not carrying their fair share of the defense burden.

Figure 10 takes the same basic data displayed in Figure 9 and presents it as a function of basic wealth, that is, GDP, Prosperity Index, and Population Share. The intent is to compare contributions with ability to contribute.

Analysis of the Figure 10 data leads to the same conclusions arrived at when evaluating the data in Figure 9. U.S. contributions are very high and non-U.S. NATO low when defense spending is compared to GDP. When prosperity share is considered (column C2), however, the U.S. share drops and the allies' share comes up to 1.00, which means that their contributions are exactly equal to their ability to contribute. Manpower contributions are measured against share of total population only, and show that the U.S. contribution, and that of the NATO allies, is higher than its fair share. The very low U.S. contribution in armored division equivalents and aircraft shares is made even more visible in this format.

FIGURE 9

B. Selected Indicators of Contribution										
	(B1)	(B2)	(B3)	(B4)	(B5)	(B6)	(B7)			
Rank	Defense Spending Share	Defense Spending (% Change 71 vs 82)	Active Defense Manpower Share	Active Defense Manpower (% Change 71 vs 82)	Active & Reserve Defense Manpower Share	Ground Forces ADES Share	Tac Air Combat Acft Share			
1	US 62.47%	TU 118.83%	US 42.21%	TU 26.95%	US 39.01%	US 38.83%	US 40.96%			
2	UK 8.60%	GR 117.41%	TU 10.87%	NO 10.00%	GE 11.99%	TU 11.90%	FR 11.26%			
3	FR 7.41%	JA 92.97%	FR 9.51%	LJ 8.33%	FR 10.09%	GE 10.64%	GE 10.02%			
4	GE 7.35%	LJ 88.70%	GE 8.77%	GR 5.23%	TU 9.16%	FR 7.48%	UK 9.16%			
5	JA 3.62%	BE 45.97%	IT 7.48%	GE 3.25%	IT 7.19%	GR 6.34%	IT 5.76%			
6	IT 2.99%	FR 42.05%	UK 7.40%	BE 2.54%	UK 6.02%	UK 5.72%	TU 4.27%			
7	CA 2.08%	NO 28.99%	JA 3.49%	FR 2.38%	GR 4.00%	IT 4.74%	GR 4.02%			
8	NE 1.47%	GE 26.73%	GR 2.81%	JA 2.28%	JA 2.61%	JA 4.18%	JA 3.63%			
9	BE 0.95%	IT 18.47%	NE 1.75%	CA -4.23%	NE 2.60%	NE 3.15%	CA 2.57%			
10	TU 0.91%	NE 15.91%	CA 1.61%	IT -5.40%	NO 1.92%	DE 1.85%	BE 2.41%			
11	GR 0.87%	CA 14.61%	BE 1.54%	NE -6.48%	BE 1.92%	NO 1.59%	NE 2.31%			
12	NO 0.56%	UK 11.57%	PO 1.32%	US -16.33%	PO 1.29%	BE 1.43%	NO 1.34%			
13	DE 0.46%	DE 3.87%	NO 0.68%	UK -21.81%	CA 1.24%	PO 1.24%	DE 1.24%			
14	PO 0.26%	US -0.15%	DE 0.54%	DE -23.69%	DE 0.96%	CA 0.90%	PO 1.06%			
15	LJ 0.01%	PO -22.90%	LJ 0.02%	PO -59.82%	LJ 0.01%	LJ 0.01%	LJ 0.00%			
Non-US NATO	33.92%	25.53%	54.30%	-3.15%	58.38%	56.99%	55.42%			
Non-US NATO + Japan	37.53%	29.90%	57.79%	-2.84%	60.99%	61.17%	59.04%			
Total NATO	96.38%	7.59%	96.51%	-9.39%	97.39%	95.82%	96.37%			
Total NATO + Japan	100.00%	9.34%	100.00%	-9.03%	100.00%	100.00%	100.00%			

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 17.

FIGURE 10

C. Selected Indicators Comparing Contribution With Ability to Contribute						
(C1)		(C2)	(C3)	(C4)	(C5)	(C6)
Rank	Ratio: Def. Spend. Share/GDP Share (B1 ÷ A1)	Ratio: Def. Spend. Share/ Prosperity Index Share (B1 ÷ A4)	Ratio: Active Def. Manpower/ Pop. Share (B3 ÷ A2)	Ratio: Active & Res. Def. Manpower/ Pop. Share (B5 ÷ A2)	Ratio: ADE Share/ Prosperity Index Share (B6 ÷ A4)	Ratio: Acft Share/ Prosperity Index Share (B7 ÷ A4)
1	GR 1.59	TU 11.68	GR 2.02	NO 3.29	TU 153.38	TU 55.02
2	US 1.43	GR 4.54	TU 1.63	GR 2.87	GR 33.16	GR 21.00
3	UK 1.26	PO 3.57	US 1.28	TU 1.38	PO 16.79	PO 14.33
4	TU 1.19	UK 1.64	FR 1.23	BE 1.37	DE 2.26	BE 2.51
5	FR 0.95	US 1.20	NO 1.16	GE 1.37	NE 1.81	IT 2.05
6	BE 0.78	IT 1.06	BE 1.10	DE 1.32	IT 1.69	UK 1.75
7	PO 0.77	FR 1.04	GE 1.00	FR 1.31	NO 1.57	FR 1.59
8	GE 0.77	BE 0.99	UK 0.93	NE 1.28	BE 1.49	DE 1.51
9	NE 0.74	NE 0.84	IT 0.93	US 1.18	GE 1.14	NO 1.33
10	NO 0.69	GE 0.79	PO 0.93	PO 0.91	UK 1.09	NE 1.32
11	IT 0.59	DE 0.56	NE 0.86	IT 0.89	FR 1.05	GE 1.07
12	DE 0.56	NO 0.55	DE 0.74	UK 0.76	US 0.75	US 0.79
13	CA 0.49	CA 0.46	CA 0.46	CA 0.35	JA 0.30	CA 0.57
14	IU 0.28	IU 0.35	IU 0.33	IU 0.21	IU 0.21	JA 0.26
15	JA 0.22	JA 0.26	JA 0.21	JA 0.16	CA 0.20	IU 0.00
Non-US NATO	0.85	1.00	1.08	1.16	1.68	1.63
Non-US NATO + Japan	0.67	0.78	0.86	0.91	1.27	1.23
Total NATO	1.15	1.12	1.16	1.17	1.12	1.12
Total NATO + Japan	1.00	1.00	1.00	1.00	1.00	1.00

Source: Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 18.

Perhaps the most significant facts presented in Figure 10 are the relative contributions of Japan. In four of the six categories, Japan ranks dead last. In the remaining two categories, it ranks 13th and 14th out of 15. The unavoidable conclusion is that the U.S. is subsidizing Japan very heavily in defense matters, and that if any country needs to be pressured to improve its "burden-sharing", it is Japan, not the NATO allies.

One more piece of available data is relevant - developmental assistance as a percent of GDP, Figure 11. This data indicates the percent of GDP that is contributed to developing countries. This aid is separate from military assistance and is not included in the defense budget. Most countries feel that this aid contributes to stability and peace in the world and, therefore, it should be counted as a contribution to defense. The argument was persuasive enough to convince DoD to include the data in its annual report to the Congress. The message conveyed by the chart is that the non-U.S. NATO allies contribute about twice as much aid to developing nations as does the U.S.

In reviewing all of the data, we find that the U.S. spends a great deal more money on defense than any of the other allies, singly or in combination, but when ability to contribute (that is GDP and per capita GDP) is considered, the total contribution of the non-U.S. NATO allies equals their ability to contribute. When the focus moves from defense inputs to outputs, the contributions of the non-U.S. NATO allies clearly exceed their fair share. Manpower contributions exceed population share,

FIGURE 11

OFFICIAL DEVELOPMENTAL ASSISTANCE AS PERCENT OF GDP

	Percentages						\$ Millions		
	1977	1978	1979	1980	1981	1982	1980	1981	1982
Belgium	.46	.55	.57	.50	.59	.60	595	575	501
Canada	.50	.52	.48	.43	.43	.42	1075	1189	1197
Denmark	.60	.75	.77	.74	.73	.77	481	403	415
France	.60	.57	.60	.64	.73	.75	4162	4177	4028
Germany	.33	.37	.45	.44	.47	.48	3567	3182	3163
Italy	.10	.14	.08 <sup>a</sup>	.17	.19	.24	683	665	812
Japan	.21	.23	.27	.32	.28	.29	3353	3170	3023
Netherlands	.86	.82	.98 <sup>a</sup>	1.03	1.08	1.08	1630	1510	1474
Norway	.83	.90	.93 <sup>a</sup>	.85	.82	.99	486	467	559
United Kingdom	.45	.46	.52	.35	.44	.38	1852	2191	1793
United States	.25	.27	.20	.27	.20	.27	7138	5782	8202
Non US NATO	.44	.46	.50	.48	.52	.52	14,523	14,360	12,149
NATO	.34	.37	.36	.38	.36	.38	21,661	20,140	20,351
Total	.32	.34	.34	.37	.35	.37	25,014	23,310	23,374

a. Excluding Administrative cost (not available)

Note: Administrative cost excluded up to 1978

Source: Casper W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 87.

Source: State Department

and armored division equivalents and aircraft share exceed prosperity share by wide margins. Even the non-military measure of aid to developing countries shows the allies to be doing more than their fair share.

The allegation that the non-U.S. NATO allies are not contributing their fair share to the common defense simply cannot be supported by the existing data. In order to sustain such a thesis, the U.S. would have to be compared to each individual member country. Such comparisons would reveal that some of the individual countries are not contributing their fair shares in dollars or manpower. ADE and aircraft shares could not be used because the U.S. is lower than all European countries, except Luxembourg, in these categories.

Comparing individual countries to the U.S. share would produce some questionable results, since the U.S. has a prosperity share  $5\frac{1}{2}$  times the largest NATO ally, West Germany, and 1300 times the smallest, Luxembourg. The U.S. economy is orders of magnitude larger than those of the allies. It would be statistically and economically unreasonable to demand that those economies distribute their defense spending in the same ratios as the U.S.

Comparing individual countries to the U.S. would also lead to arguments over efficiencies. Virtually every country can point to ADE and aircraft shares larger than the U.S.; most can also point to manpower shares of significance. The argument that the U.S. is spending wastefully and getting little capability for its money would be raised by each country as it pointed to relatively large defense outputs

acquired at considerably less cost than the U.S. pays. Except for Belgium and the Netherlands, every one of the allies could propose that they increase military pay to U.S. levels as a means of equalling contributions. The point being that such an action would increase defense spending very substantially, but not increase defense capabilities at all.

Individual comparisons would also lead to detailed examinations of the unique needs and contributions of each country and force recognition of cost factors not admitted under NATO definitions. Consider the case of West Germany:

"Measurements both of input and of output fail to acknowledge the hidden costs and benefits of alliance membership involved in the provision of territory and real estate for bases and facilities at little or no cost. In this respect, the cost to the Federal Republic of paying for the allied forces in Berlin are a significant yet omitted item. If the German outlay on Berlin were computed, German defense expenditures would increase by 25%. When all German 'defense claims' are included - i.e. cost savings from low-cost conscript personnel, Berlin expenditures, host-nation support for both U.S. and non-U.S. forces, resource flows to developing countries (which can be seen as a means of supporting Western security objectives) and effects of taxation on defense expenditures - then German defense expenditure as a percentage of GDP would rise to above 5.1 percent." 21

If one were finally able to prove conclusively that this country or that was not providing its fair share, there would have to be an accompanying admission that other allies were contributing more than their fair shares, and that these countries are entitled to reduce their contributions as much as the underpaying countries are required to increase their contributions.

There is nothing to be gained by individual comparisons. The non-U.S. NATO allies must be regarded as an economic entity for the purpose of determining contributions to the alliance - if the focus is to remain on equity and fair share contributions. And, as long as the non-U.S. NATO allies are regarded as an entity, they are clearly contributing their fair share to the common defense.



## V. SOCIAL WELFARE SPENDING

The final complaint so often heard about NATO defense spending is that the European allies are so heavily committed to social welfare spending that it is eating into their defense spending; that defense spending is being traded off for social welfare spending. To support this proposition one would have to establish the existence of a "zero sum" relationship between defense and welfare spending, that is, one increases only at the expense of the other, so that as one goes up a given amount, the other goes down an approximately equal amount.

Kelleher, Domke, and Eichenberg seem to offer the most recent, and the most comprehensive research on the subject.<sup>22</sup> The basic results of their research indicate that both welfare spending and defense spending are a function of economic conditions in general and economic growth in particular, and not a function of each other.

"Our research suggests that emphasis on the choices between guns and butter, even at the margin, is a misreading of Western public expenditure patterns, particularly since at least 1920. The manifold increases in social welfare spending have been almost totally financed from growth: increases in national GNP and the new state revenues this growth produced. The real level of defense expenditure has also greatly increased; only defense's relative share of GNP, and of central government expenditure, has declined. The causes, seemingly, can be found not in any conscious balancing of policy trade-offs, but rather in the ratchet effects associated with particular redistributive policies and mechanisms. In periods of economic decline (relatively few), as in times of economic bounty (most), states are not committed to the direct provision of extended services (as in education) and, more significantly, to

substantial automatic transfer payments to individuals (for example, social insurance, family allowances), Western political man, elite and mass, has come to expect these services and payments, and indeed a fair rate of economic growth as the normal or usual pattern." 23

In support of their thesis they display the trend lines of defense and welfare spending for the U.S., West Germany, France, and the United Kingdom. See Figures 12 - 17.

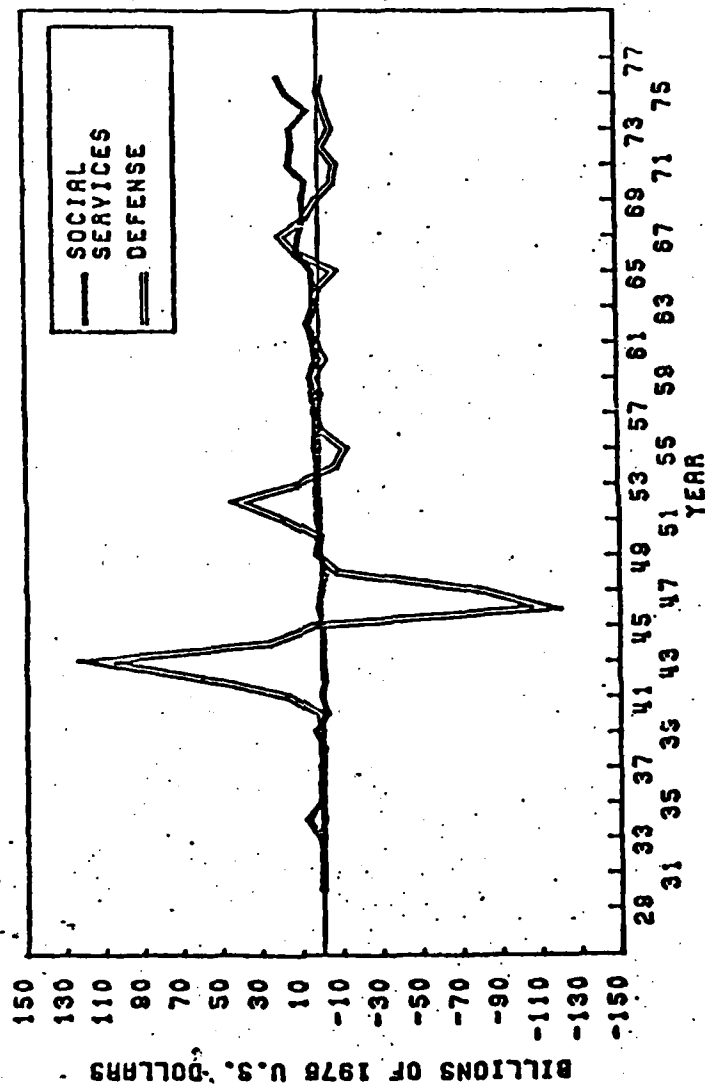
The trends revealed by the various national graphs show remarkable similarities. The trends in both defense and welfare spending, in each country, are upward. Except for some periodic shifts in the defense trend lines corresponding to times of war, the trends are approximately parallel. At any rate, there is no evidence of the "zero sum" relationship necessary to support the thesis that welfare spending is reducing defense spending.

"Defense expenditures, not surprisingly, fluctuate most in time of war, general or limited, but seem largely to fluctuate around a relatively stable trend line. Simple inspection, moreover, does not allow dramatic inferences about continual trade-offs in any state and suggests instead a push-pull phenomenon, most often during and immediately after war involvement."<sup>24</sup>

In defense of the proposition that it is economic conditions, and especially GNP growth, that ultimately determines the levels of welfare and defense spending, the research data of Kelleher, Domke, and Eichenberg is offered in Figure 18.

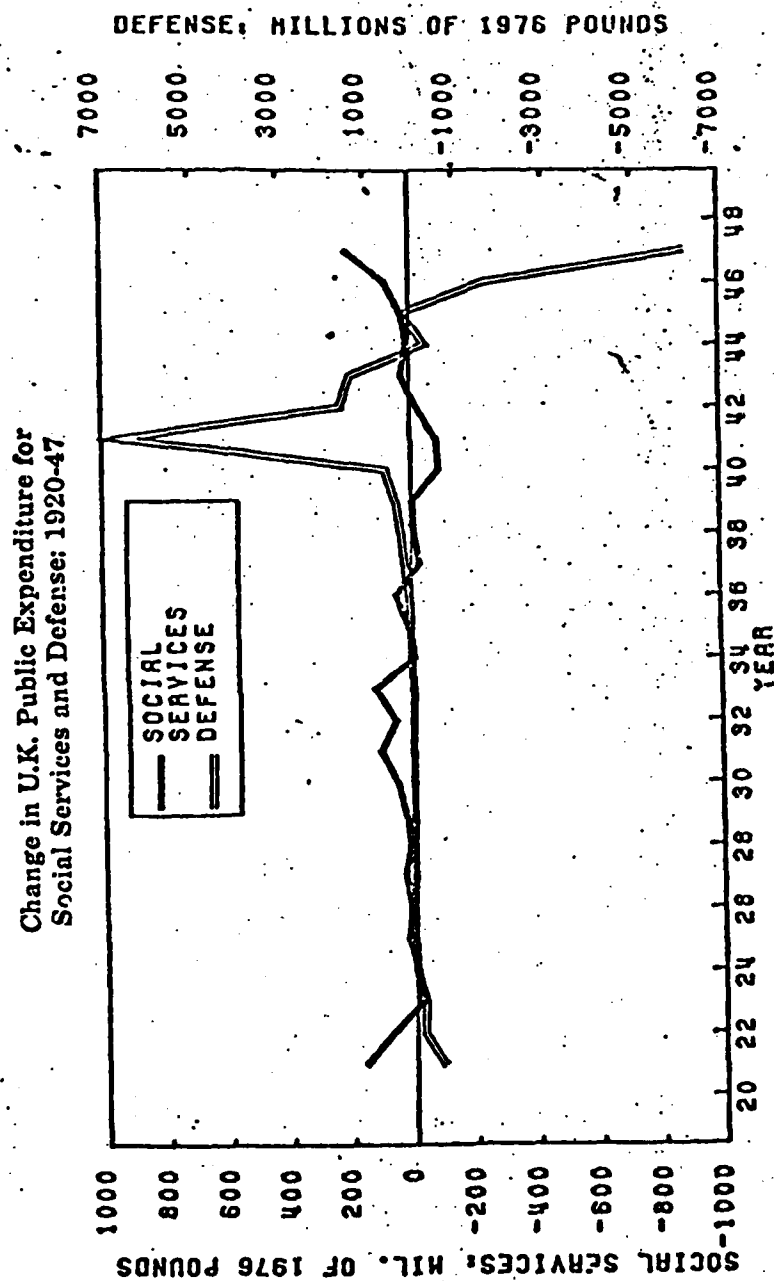
FIGURE 12

Change in U.S. Federal Expenditure for  
Social Services and Defense, 1929-76



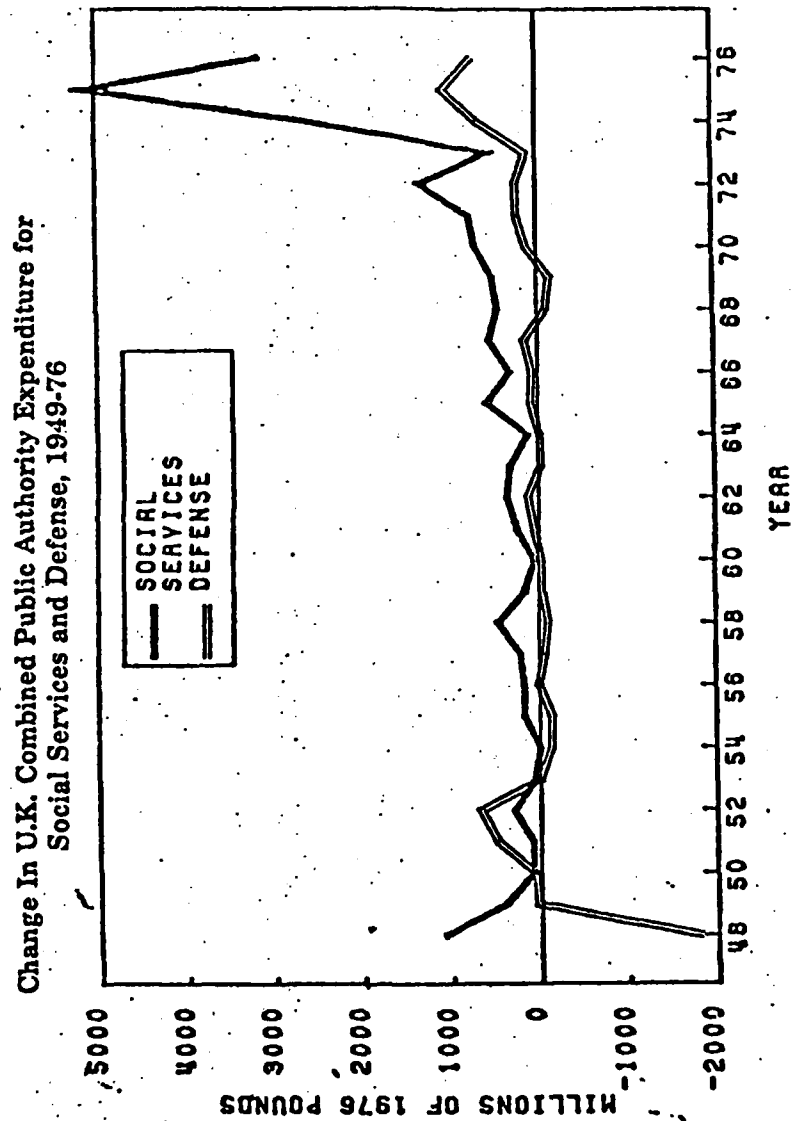
Source: Catherine M. Kelleher, William Domke, and Richard Eichenberg, "Guns and Butter: Patterns in Public Expenditure in the United States and Western Europe, 1920-75," in *Defense Politics of the Atlantic Alliance*, ed. Edwin H. Fedder (New York: Praeger Publishers), 1980, p. 159.

FIGURE 13



Source: Kelleher, Domke, and Eichenberg, p. 160

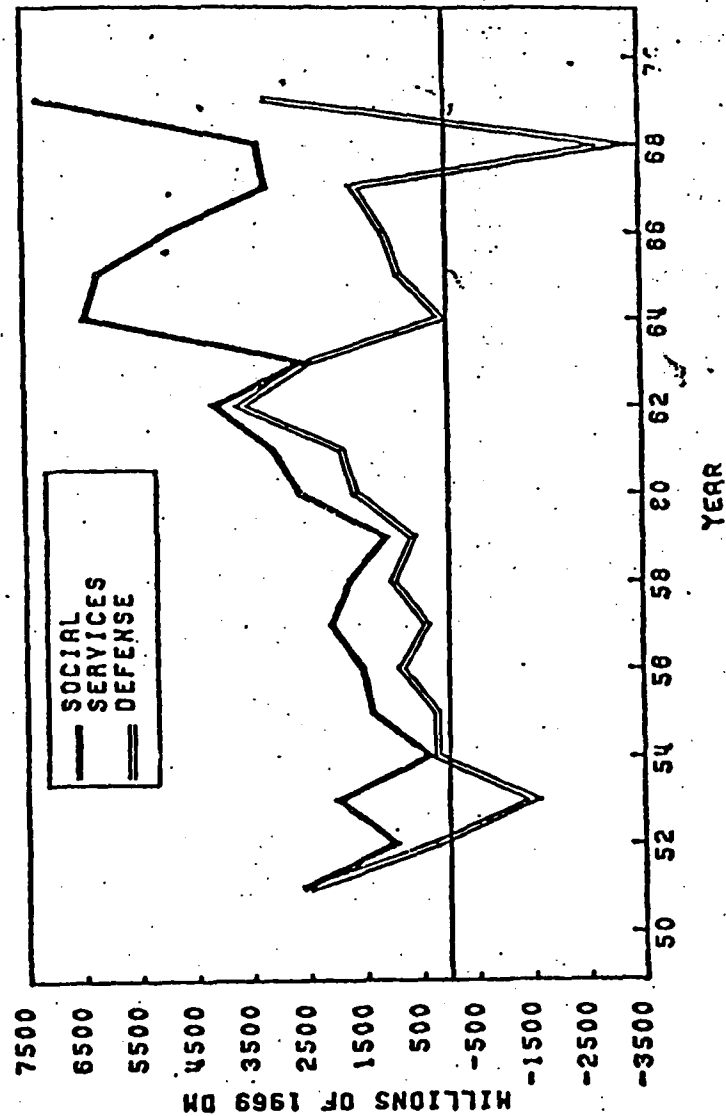
FIGURE 14



Source: Kelleher, Domke, and Eichenberg, p. 161.

FIGURE 15

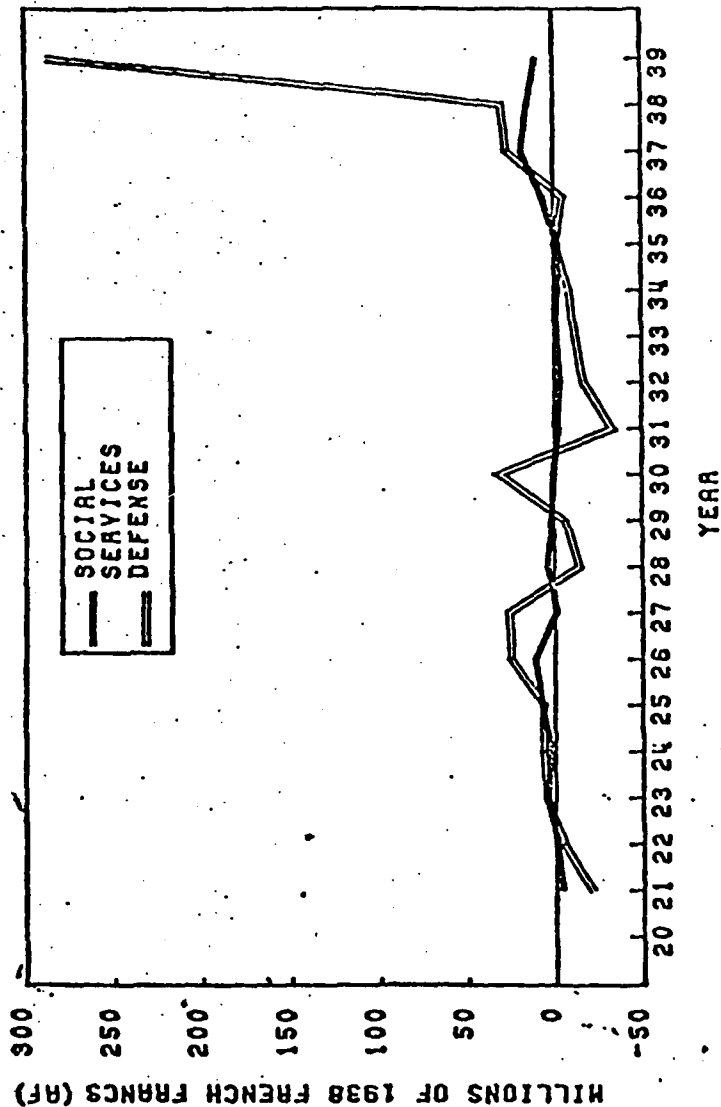
Change in FRG Combined Public Authority Expenditure for  
Defense and Social Services, 1950-69



Source: Kelleher, Domke, and Eichenberg, p. 162

FIGURE 16

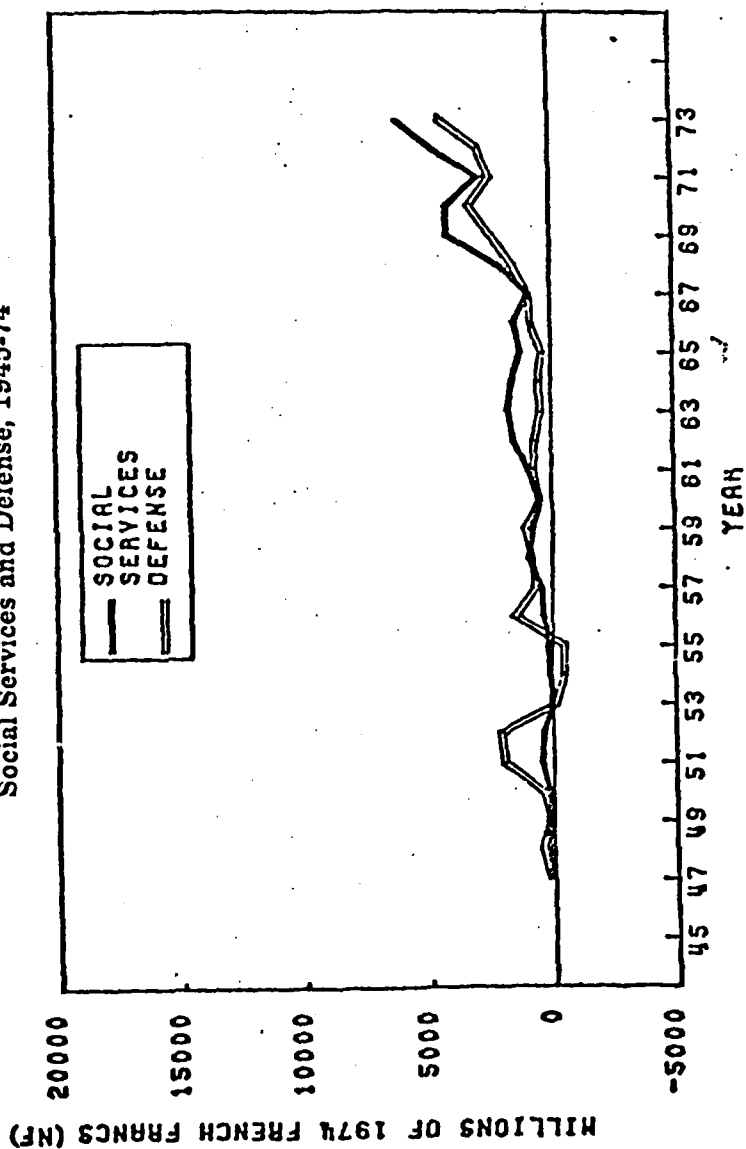
Change in French Central Government Expenditure for  
Defense and Social Services, 1920-39



Source: Kelleher, Domke, and Eichenberg, p. 163.

FIGURE 17

Change in French Central Government Expenditure for  
Social Services and Defense, 1945-74



Source: Kelleher, Domke, and Elchenberg, p. 164.



FIGURE 18

## Comparative Table of Partial Correlation Coefficients

United States		United Kingdom		Federal Republic of Germany		France	
1929-76		1920-47		1948-76		1920-39	
				Significant Effects			
GNP	.78	Revenue as percent of GNP	.55	Wilson prime minister	.54	GNP	.57
Change in Defense expenditures	-.46	Conservative prime minister	.45	Unemployment percent	.44		
Revenue as percent of GNP	-.38						
Republican president	.32						
Unemployment percent	.31						
				Insignificant Effects			
Republican Congress	-.24	World War II	-.34	GNP	.40	Revenue as percent GNP	-.34
War	.22	Change in defense expenditures	.18	Expenditure in percent of GNP	.35	Left government	.33
Expenditures as percent of GNP	.19	Expenditures as percent of GNP	-.18	Conservative prime minister	.30	Expenditure as percent of GNP	.23
		GNP	.15	Revenue as percent of GNP	.29	War	.19
		Unemployment	.13	Change in defense expenditures	.23	Change in defense expenditures	-.18
				Unemployment percent	.03	GNP	.14
						Revenue as percent of GNP	-.05
						Left government	.02
						Unemployment percent	.03
						DeGaulle	.01

Source: Kelleher, Domke, and Eichenberg, pp. 176-177.

As one can readily see from the table, GNP is a significant factor affecting social welfare spending in three of the four countries. The researchers put it this way:

"Gross national product is clearly the most prominent explanatory factor for all the post-war models. The British case is the weakest; for this period, GNP is listed as an insignificant effect, though it is very close to the threshold of statistical significance. In a model excluding the control variable for the "Wilson years", indeed, GNP is the largest and most statistically significant variable."<sup>25</sup>

Interestingly enough, the U.S. does show changes in defense expenditures as having significant impact on social welfare spending. The U.S. is the only one of the four countries which shows this pattern, and it may be U.S.'s awareness of its own linkage between defense and welfare spending that causes it to accuse the Europeans of the same linkage. The researchers, however, suggest that the significance of changes in U.S. defense spending derives from the fact that these changes always occurred during economic downturns, at the end of wars.

Whatever one's position on the U.S., it is clear that the best available research data will not support the thesis that European social welfare spending is being done at the expense of defense spending. What current research will support is the belief that both defense and welfare spending are functions of the general economic growth of the country, and both will tend to follow parallel growth lines.

## VI. CONCLUSIONS

Looking at the whole issue, one is struck by the fact that there is so little "real evidence" to support the U.S. complaint that the other NATO members are not carrying their fair share of the common defense burden, and that they are using the U.S. to subsidize defense costs while they focus on social welfare spending.

A brief look at history reveals a U.S. preoccupation with its desire to terminate its involvement in Europe, and a continuing suspiciousness of European motives. Driven by its distrust of the Europeans, the U.S. has consistently focused on simplistic measures of European contributions to the Alliance, even when it was clear that these measures failed to provide reasonably accurate measures of European effort. The U.S. became virtually totally focused on gross defense spending as the sole determinant of a country's contributions. Simplistic measures, like the "three percent solution", were grasped readily without any questioning of the validity, or practicality, of such measures. As a result of the U.S. approach, European contributions to the alliance have consistently been understated and "underappreciated".

The historical preference for simplistic measures is seen again in the official practice of measuring burden-sharing among NATO allies by "total defense spending". The incompleteness of this measure, along with the technical problems associated with multinational comparisons, make the real value of the measure very questionable. The mere fact that the focus is on money spent, not capability acquired, should have disqualified

the measure from common use. In the final analysis, the measurement mechanisms in use eliminate from consideration too much of importance, and include too much subjectivity in what they do measure by virtue of the selection of exchange rate and inflation adjustment factors.

Putting aside the inadequacies of the measurement mechanisms and looking at the available data anyway, one is struck by the fact that so little of the data indicates that the non-U.S. NATO allies are failing to carry their fair share. In spite of the many flaws in the measurement procedures, it is unmistakably clear that when the focus is on capability acquired, that is manpower, armored division equivalents, or shares of combat aircraft, the non-U.S. NATO members are doing more than their fair share. It is only when the measure focuses solely on dollars spent that the allies appear to be short. Even that appearance evaporates, however, when prosperity level is added to the equation.

Having shown that the allies are, in fact, carrying their fair shares of the defense burden, the allegation that social welfare spending is precluding defense spending is largely moot. Curiosity, however, leads us to a review of at least the most current research. Although the findings here are not so critical to the original thesis, given the lack of evidence that the allies are not carrying their fair share of the defense burden, they (the findings) do seem to have great significance for the future.

If it is true that European defense expenditures are a function of economic growth, and are not merely the "left overs" after the welfare

budget has been developed, the message for the U.S. is that the U.S. cannot permit U.S. economic conditions, which are destructive to European economies, to continue unchecked. The simple truth appears to be that lower European defense spending is directly linked to the economic downturn they have been experiencing, which, in turn, has been fostered and perpetuated by the high U.S. deficit spending and interest rates. Since the U.S. economic conditions are such that an enormous flow of capital is being drawn from Europe, the U.S. must bear a great part of the responsibility for the European recession, and the decrease in defense spending that must accompany it. The U.S. must recognize the role it plays in the matter, and take the necessary action to permit economic recovery in Europe.

#### FOOTNOTES

<sup>1</sup>James R. Golden, The Dynamics of Change in NATO: A Burden-Sharing Perspective (New York: Praeger Publishers, 1983), p. 124.

<sup>2</sup>Simon Lunn, Burden-Sharing in NATO (London: Routledge & Kegan Paul Ltd, 1983), p. 8.

<sup>3</sup>Lunn, p. 9.

<sup>4</sup>Amos A. Jordan and William J. Taylor, Jr., American National Security, Policy and Process (Baltimore: The Johns Hopkins University Press, 1981), p. 66.

<sup>5</sup>Ibid.

<sup>6</sup>Golden, op. cit., p. 125.

<sup>7</sup>Lunn, op. cit., p. 17.

<sup>8</sup>Ibid., p. 18.

<sup>9</sup>Ibid., p. 84.

<sup>10</sup>Golden, op. cit., p. 105.

<sup>11</sup>Caspar W. Weinberger, Report on Allied Contributions to the Common Defense (Washington, D.C.: Department of Defense, March 1984), p. 81.

<sup>12</sup>Lunn, op. cit., p. 55.

<sup>13</sup>Golden, op. cit., p. 32.

<sup>14</sup>Ibid., p. 42.

<sup>15</sup>Ibid., p. 34.

<sup>16</sup>Ibid.

<sup>17</sup>Ibid.

<sup>18</sup>Lunn, op. cit., p. 54.

<sup>19</sup>Weinberger, op. cit., p. 41

<sup>20</sup>Ibid., p. 45.

<sup>21</sup>Ibid., p. 56.

<sup>22</sup>Catherine M. Kelleher, William Donke, and Richard Eichenberg, "Guns and Butter: Patterns in Public Expenditure in the United States and Western Europe, 1920-75," in Defense Politics of the Atlantic Alliance, ed. Edwin H. Fedder (New York: Praeger Publishers, 1980), p. 153.

<sup>23</sup>Ibid.

<sup>24</sup>Ibid., p. 157.

<sup>25</sup>Ibid., p. 174

## BIBLIOGRAPHY

- Comptroller General of the United States. Report to the Congress, Additional Costs of Stationing US Forces in Europe. Washington, D.C.: General Accounting Office, 1976.
- Fedder, Edwin H., ed. Defense Politics of the Atlantic Alliance. New York: Praeger Publishers, 1980.
- Foreign Policy Research Institute. The Three Per Cent Solution and the Future of NATO. Philadelphia: Foreign Policy Research Institute, 1981.
- Golden, James R. NATO Burden-Sharing, Risks and Opportunities. New York: Praeger Publishers, 1983.
- Golden, James R. The Dynamics of Change in NATO: A Burden-Sharing Perspective. New York: Praeger Publishers, 1983.
- International Institute for Strategic Studies. The Military Balance 1984-1985. London: International Institute for Strategic Studies, 1984.
- International Institute for Strategic Studies. The Military Balance 1983-1984. London: International Institute for Strategic Studies, 1983.
- Jordan, Amos A., and William J. Taylor, Jr. American National Security, Policy & Process. Baltimore: The Johns Hopkins University Press, 1981.
- Kelleher, Catherine M., William Domke, and Richard Eichenberg. "Guns and Butter: Patterns in Public Expenditure in the United States and Western Europe, 1920-75," in Defense Politics of the Atlantic Alliance, ed. Edwin H. Fedder, New York: Praeger Publishers, 1980.
- Lunn, Simon. Burden-Sharing in NATO. London: Routledge & Kegan Paul Ltd, 1983.
- Tucker, Robert W., and Linda Wrigley, eds. The Atlantic Alliance and Its Critics. New York: Praeger Publishers, 1983.
- Weinberger, Caspar W. Report on Allied Contributions to the Common Defense. Washington, D.C.: Department of Defense, 1981, 1982, 1983, 1984.



**END**

**FILMED**

**10-85**

**DTIC**